

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims: Please amend the claims as follows.

We claim:

Claim 1. (Withdrawn) A method for treating a patient suffering from a carcinoma in which Hsp47 is expressed on the surface of at least some of cells, comprising administering to the patient an effective amount of an agent comprising a targeting moiety which binds specifically to an external domain of Hsp47.

Claim 2. (Withdrawn) The method of claim 1, wherein the targeting moiety is an antibody, or a fragment thereof.

Claim 3. (Withdrawn) The method of claim 2, wherein the antibody is a monoclonal antibody.

Claim 4. (Withdrawn) The method of claim 1, wherein the targeting moiety is a peptide.

Claim 5. (Withdrawn) The method of claim 4, wherein the peptide is XHyHyXXHyXXXXHyHy (SEQ ID NO: 1) or HyXXXHyHyXXIlyXXX (SEQ ID NO: 2), wherein X, independently, can be any amino acid, and Hy, independently, can be any hydrophobic amino acid.

Claim 6. (Withdrawn) The method of claim 4, wherein the peptide is one of SEQ ID NO:3 to SEQ ID NO: 25 of Tables I and 2.

Claim 7. (Withdrawn) The method of claim 1, wherein the targeting moiety is a bacteriophage on whose surface is a peptide which binds specifically to an external domain of Hsp47.

Claim 8. (Withdrawn) The method of claim 1, wherein the agent further comprises a therapeutic moiety which is a toxin, a radioisotope or radionuclide, an antibody, or a nucleic acid which encodes a therapeutic gene.

Claim 9. (Withdrawn) The method of claim 1, for modulating the interaction of a tumor cell with an intracellular matrix, tumor cell invasion, migration or motility of malignant cells, or tumor cell metastasis.

Claim 10. (Withdrawn) A method for modulating a cell which expresses Hsp47 on its surface, comprising administering to the cell an effective amount of an agent comprising a targeting moiety which binds to an external domain of Hsp47.

Claim 11. (Withdrawn) The method of claim 1, wherein the Hsp47 is human.

Claim 12. (Withdrawn) A method for detecting a carcinoma in which Hsp47 is expressed on the surface of at least some cells, comprising contacting the carcinoma with a detectable agent comprising a targeting moiety which binds specifically to an external domain of Hsp47.

Claim 13. (Withdrawn) The method of claim 12, wherein the targeting moiety is an antibody or a fragment thereof, a peptide, or a bacteriophage on whose surface is a peptide, each of which moieties binds specifically to an external domain of Hsp47.

Claim 14. (Withdrawn) The method of claim 12, wherein the detectable agent is detectable by MRI, X- Ray, gamma scintigraphy, or CT scanning.

Claim 15. (Withdrawn) A method for detecting a cell which expresses Hsp47 on its surface, comprising administering to the cell a detectable agent comprising a targeting moiety which binds specifically to an external domain of Hsp47.

Claim 16. (Withdrawn)

The method of claim 12, wherein the Hsp47 is human.

Claim 17. (Withdrawn)

A method to screen for an agent which binds specifically to a carcinoma in which Hsp47 is expressed on the surface of at least some cells, comprising identifying an agent comprising a targeting moiety which binds specifically to an external domain of Hsp47.

Claim 18. (Withdrawn)

The method of claim 17, wherein the agent is useful for treating a carcinoma in a patient.

Claim 19. (Withdrawn)

The method of claim 17, wherein the agent is useful for diagnosing a carcinoma in a patient.

Claim 20. (Canceled)

Claim 21. (Canceled)

Claim 22. (Canceled)

Claim 23. (Canceled)

Claim 24. (Currently Amended)

An isolated peptide which binds specifically to an external domain of Hsp47 expressed on the surface of a cell, said peptide consisting of XHyHyXXHyXXXXHyHy (SEQ ID NO: 1), wherein X, independently, is any amino acid, and Hy, independently, is a hydrophobic amino acid which is

(a) tryptophan (W),

(b) leucine (L) or

(c) phenylalanine (F),

and further wherein the binding is effective to modulate the activity of the cell.

Claim 25. (Currently Amended)

An isolated peptide which binds specifically to an external domain of Hsp47 expressed on the surface of a carcinoma, consisting of XHyHyXXHyXXXXHyHy (SEQ ID NO: 1), wherein X, independently, is any amino acid,

and Hy, independently, is a hydrophobic amino acid which is

(a) tryptophan (W),

(b) leucine (L) or

(c) phenylalanine (F),

and further wherein the binding is effective to generate a cytostatic or cytolytic effect on the carcinoma or to image the carcinoma above a background of non-carcinoma cells.

Claim 26. (Previously Presented) The peptide of claim 24, wherein said peptide is not full-length collagen, and is not naturally occurring collagen or a fragment thereof.

Claim 27. (Canceled)

Claim 28. (Canceled)

Claim 29. (Previously Presented) An agent comprising a targeting moiety which binds specifically to an external domain of Hsp47 expressed on the surface of a cell, in an amount effective to modulate the activity of the cell, wherein said targeting moiety comprises the peptide of claim 24.

Claim 30. (Previously Presented) A pharmaceutical composition comprising a peptide of claim 24 and a pharmaceutically acceptable carrier.

Claim 31. (Previously Presented) A pharmaceutical composition comprising an agent of claim 29 and a pharmaceutically acceptable carrier.

Claim 32. (Previously Presented) A pharmaceutical composition, comprising an agent and a pharmaceutically acceptable carrier wherein said agent comprises a targeting moiety which binds specifically to an external domain of Hsp47 located on the surface of a carcinoma, in an amount effective to generate a cytolytic or cytostatic effect on the carcinoma.

Claim 33. (Previously Presented) A peptide of claim 24 wherein at least one of said hydrophobic amino acids is W (Trp), L(Leu) or F(Phe).

Claim 34. (Currently Amended) A peptide selected from a group consisting of which is:

a) NWTLPQAQFAYL (SEQ. ID NO. 9) ~~and~~ or

b) KVPPALPSPWTS (SEQ. ID NO. 13).

Claim 35. (Previously Presented) A pharmaceutical composition comprising a peptide of claim 33 and a pharmaceutically acceptable carrier.

Claim 36. (Previously Presented) The agent of claim 29 further comprising a therapeutic moiety which is a toxin, a radioisotope or radionuclide, an antibody, or a nucleic acid which encodes a therapeutic gene.

Claim 37. (Previously Presented) The agent of claim 29 further comprising a detectable agent, said detectable agent being detectable by MRI, X-Ray, gamma scintigraphy, or CT scanning.

Claim 38. (Previously Presented) A peptide of claim 24 wherein at least one of said hydrophobic amino acid is W (Trp) or F(Phe).